

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method for compressing image data fed from an image sensor having a color pixel array, comprising:

- (a) extracting red, green and blue(R/G/B) color values from the image data;
- (b) calculating vertical difference color values between current R/G/B color values of a current horizontal line and previous R/G/B color values of a previous horizontal line;
- (c) dividing the vertical difference color values with a predetermined loss value to obtain quotient color values;
- (d) estimating horizontal difference color values between a current quotient color value and a previous quotient color value in the current horizontal line; and
- (e) coding the horizontal difference values.

2. (Currently Amended) A method according to claim 1, further including before (b):
determining if the image data corresponds to a first horizontal line of a frame and, if the image data corresponds to the first horizontal line of the frame, proceeding to (c) without performing (b).

3. (Currently Amended) A method according to claim 1 or claim 2, further comprising before (c):

adding remainder color values obtained previously from (c) to the vertical difference values.

4. (Original) A method according to claim 1 or claim 2, wherein the color pixel array has a bayer pattern.

5. (Currently Amended) A method according to claim 1, further comprising:

- (g) repeating (a) to (d) during one horizontal line of the color pixel array and initializing the previous R/G/B color values after completing one horizontal line of the color pixel array.

6. (Currently Amended) A method for compressing image data fed from an image sensor having a color pixel array, comprising:

- (a) extracting red, green and blue(R/G/B) color values from the image data;
- (b) calculating vertical difference values between current R/G/B color values of a current horizontal line and previous R/G/B color values of a previous horizontal line, respectively;
- (c) adding the vertical difference values with previous R/G/B remainder color values to obtain added color values;
- (d) dividing the added color values with a predetermined loss value to generate current R/G/B quotient color values and current R/G/B remainder color values;
- (e) estimating horizontal difference values between the current R/G/B quotient color values and previous R/G/B quotient color values in the current horizontal line; and
- ~~[[e)]~~(f) coding the horizontal difference values.

7. (Currently Amended) A method according to claim 6, further comprising:

~~[[f)]~~(g) repeating (a) to (e) during one horizontal line of the color pixel array and initializing the previous R/G/B color values after completing one horizontal line of the color pixel array.

8. (Currently Amended) A method according to claim 6, further comprising before (b):

~~[[g)]~~(h) determining if the image data corresponds to a first horizontal line of a frame and, if the image data corresponds to the first horizontal line of the frame, performing (c) without performing (b).

9. (Currently Amended) A computer readable medium having program code stored therein which when executed by a computer causes data representing image data from an image sensor having a color pixel array to be compressed by:

- (a) extracting red, green and blue(R/G/B) color values from the image data;
- (b) calculating vertical difference color values between current R/G/B color values of a current horizontal line and previous R/G/B color values of a previous horizontal line;
- (c) dividing the vertical difference color values with a predetermined loss value to obtain quotient color values;

- (d) estimating horizontal difference color values between a current quotient color value and a previous quotient color value in the current horizontal line; and
- (e) coding the horizontal difference values.

10. (Currently Amended) A computer readable medium according to claim 9, further including before (b):

determining if the image data corresponds to a first horizontal line of a frame and, if the image data corresponds to the first horizontal line of the frame, proceeding to (c) without performing (b).

11. (Currently Amended) A computer readable medium according to claim 9 or claim 10, further comprising before (c):

adding remainder color values previously obtained from (c) to the vertical difference values.

12. (Original) A computer readable medium according to claim 9 or claim 10, wherein the color pixel array has a bayer pattern.

13. (Currently Amended) A computer readable medium according to claim 9, further comprising:

(g) repeating (a) to (d) during one horizontal line of the color pixel array and initializing the previous R/G/B color values after completing one horizontal line of the color pixel array.

14. (Currently Amended) A computer readable medium having program code stored therein which when executed by a computer causes data representing image data from an image sensor having a color pixel array to be compressed by:

- (a) extracting red, green and blue(R/G/B) color values from the image data;
- (b) calculating vertical difference values between current R/G/B color values of a current horizontal line and previous R/G/B color values of a previous horizontal line, respectively;
- (c) adding the vertical difference values with previous R/G/B remainder color values to obtain added color values;

(d) dividing the added color values with a predetermined loss value to generate current R/G/B quotient color values and current R/G/B remainder color values;

(e) estimating horizontal difference values between the current R/G/B quotient color values and previous R/G/B quotient color values in the current horizontal line; and

[(e)](f) coding the horizontal difference values.

15. (Currently Amended) A computer readable medium according to claim 14, further comprising:

[(f)](g) repeating (a) to (e) during one horizontal line of the color pixel array and initializing the previous R/G/B color values after completing one horizontal line of the color pixel array.

16. (Currently Amended) A computer readable medium according to claim 14, further comprising before (b):

[(g)](h) determining if the image data corresponds to a first horizontal line of a frame and, if the image data corresponds to the first horizontal line of the frame, performing (c) without performing (b).
